

**Notice of Allowability**

Application No.

10/084,234

Applicant(s)

ISHIKAWA ET AL

Examiner

Vikkram Bali

Art Unit

2623

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>2/28/2002</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other ____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Cynthia Nicholson, # 36,880 on 2/9/2004.

The application has been amended as follows:

In claims:

Amend claims 19 and 20 as follows:

19. (Currently Amended) A computer readable medium with a computer program code for extracting a characteristic portion from an original image, said computer program code comprising:

program code for acquiring said original image;

program code for acquiring a training image taken under a same condition under which said original image is taken;

program code for acquiring a supervisory image that includes pixels corresponding to pixels of said training image, said supervisory image designating a characteristic portion of said training image, the characteristic portion of said training image corresponding to the characteristic portion of said original image;

program code for generating a pixel evaluation model based on a relationship between a value of a first pixel of said training image and a value of a second pixel of said supervisory image, said second pixel corresponding to said first pixel, said pixel evaluation model receiving a value of one of pixels of said original image and outputting a feature value of the pixel;

program code for calculating the feature value of each pixel of said original image by using said pixel evaluation model; and

program code for defining an extractive area of said original image based on the feature value of each pixel of said original image, said extractive area including the characteristic portion of said original image.

20. (Currently Amended) A computer readable medium which stores a computer program code for extracting a characteristic portion from an original image, said computer program code comprising:

program code for acquiring said original image;

program code for acquiring a training image taken under a same condition under which said original image is taken;

program code for acquiring a supervisory image that designates a characteristic portion of said training image, said supervisory image including pixels each of which provides a supervisory output, the characteristic portion of said training image corresponding to the characteristic portion of said original image;

program code for generating a pixel evaluation model based on a relationship between a value of a first pixel of said training image and the supervisory output provided by a second pixel of said supervisory image, said second pixel corresponding to said first pixel, said pixel evaluation model receiving a value of one of pixels of said original image and outputting a feature value of the pixel;

program code for calculating the feature value of each pixel of said original image by using said pixel evaluation model; and

program code for defining an extractive area of said original image based on the feature value of each pixel of said original image, said extractive area including the characteristic portion of said original image.

***Allowable Subject Matter***

2. Claims 1-20 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Claims 1-20 are allowed because the prior art alone or in combination with fails to disclose or suggest a method for an image area extraction that includes generating a

pixel evaluation model based on a relationship between a value of a first pixel of said training image and the supervisory output provided by a second pixel of said supervisory image, said second pixel corresponding to said first pixel, said pixel evaluation model receiving a value of one of pixels of said original image and outputting a feature value of the pixel, and calculating the feature value of each pixel of said original image by using said pixel evaluation model, and defining an extractive area of said original image based on the feature value of each pixel of said original image, said extractive area including the characteristic portion of said original image, in combination with the other limitations in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 571.272.7415. The examiner can normally be reached on 7:00 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571.272.7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Vikram Bali  
Primary Examiner  
Art Unit 2623

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February 14, 2006